ABSTRACT OF DISCLOSURE

A method and apparatus control the amount of a DCT computation performed for motion image encoding. In the DCT computation amount controlling method, first, both decoder complexity information that represents the amount of a decoding computation on previous image data and ME computation amount variation information that represents information on a variation in the amount of a motion estimation (ME) computation are received. Then, the skipping of DCT operations on current image data is controlled based on the received decoder complexity information and the received ME computation amount variation information. A computation amount allowed to a decoder may be fully used, and the computation complexity of a motion image encoder may be maintained constantly regardless of the characteristics of images.